



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,449	09/11/2003	Warren E. Cory	X-1214 US	4907
24309	7590	06/19/2007		
XILINX, INC ATTN: LEGAL DEPARTMENT 2100 LOGIC DR SAN JOSE, CA 95124			EXAMINER NGUYEN, TANH Q	
			ART UNIT	PAPER NUMBER
			2182	
			MAIL DATE	DELIVERY MODE
			06/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/660,449	Applicant(s) CORY ET AL.	
	Examiner Tanh Q. Nguyen	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09/11/03 and interview on 03/21/07.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 11-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-10 and 31-43 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. During a telephone conversation between examiner Vineeta S. Panwalkar and the attorney for applicant - Justin Liu (Reg. No. 51,959) on March 21, 2007, a provisional election was made without traverse to prosecute the invention comprising claims 1-10, 31-43. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-30 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

2. Upon further review, restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-10, drawn to a circuit, classified in class 711, subclass 1.
- II. Claims 31-43, drawn to a method, classified in class 710, subclass 52.

3. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed (Invention II) can be practiced by a circuit that includes a counter for determining the amount of data in the buffer. In addition, the apparatus as claimed (Invention I) can be used to practice a process that requires read and write clocks, and additionally affecting operation of a read pointer.

4. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction were not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction were not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction were not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. **Invention II, if elected, further contains claims directed to the following patentably distinct species:**

Species 1A (claims 31-35, 37) directed to defining a nominal fill based on a latency performance, and conditioning comprising padding/omitting data to be output.

Species 1B (claims 31, 33-37) directed to defining a nominal fill based on a programmed value in a configuration register, and conditioning comprising padding/omitting data to be output.

Species 1C (claims 31, 33-35, 37-38) directed to defining a nominal fill based on

a packet length, and conditioning comprising padding/omitting data to be output.

Species 1D (claims 31, 33-35, 37, 39) directed to defining a nominal fill based on a frequency difference between a read clock and a write clock, and conditioning comprising padding/omitting data to be output.

Species 1E (claims 31, 33-35, 37, 40) directed to defining a nominal fill based on an identified protocol, and conditioning comprising padding/omitting data to be output.

Species 1F (claims 31, 33-35, 37, 41) directed to defining a nominal fill based on a determined maximum skew, and conditioning comprising padding/omitting data to be output.

Species 2A (claims 31-33, 37, 42-43) directed to defining a nominal fill based on a latency performance, and conditioning comprising halting or decrementing advancement of a write pointer.

Species 2B (claims 31, 33, 36-37, 42-43) directed to defining a nominal fill based on a programmed value in a configuration register, and conditioning comprising halting or decrementing advancement of a write pointer.

Species 2C (claims 31, 33, 37-38, 42-43) directed to defining a nominal fill based on a packet length, and conditioning comprising halting or decrementing advancement of a write pointer.

Species 2D (claims 31, 33, 37, 39, 42-43) directed to defining a nominal fill based on a frequency difference between a read clock and a write clock, and conditioning comprising halting or decrementing advancement of a write pointer.

Species 2E (claims 31, 33, 37, 40, 42-43) directed to defining a nominal fill based

on an identified protocol, and conditioning comprising halting or decrementing advancement of a write pointer.

Species 2F (claims 31, 33, 37, 41-43) directed to defining a nominal fill based on a determined maximum skew, and conditioning comprising halting or decrementing advancement of a write pointer.

The species are independent or distinct because there are different modes of operations (six different modes for defining a nominal fill and two different modes for conditioning data), and further because there is no overlap in scope between the different modes of operation.

Applicant is required under 35 U.S.C. 121 to further elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable - if Invention II is elected. Currently, 31, 33 and 37 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

6. Applicant is advised that the reply to this requirement must include (i) an election of a species or invention to be examined to be complete, even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

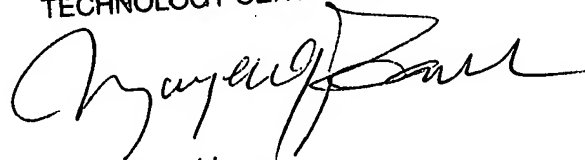
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Q. Nguyen whose telephone number is 571-272-4154. The examiner can normally be reached on M-F 9:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TANH Q NGUYEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100



June 11, 2007

TQN
June 11, 2007